

BREAKOUT TANK EVALUATION FORM

Name of Operator:		
Facility Location:	Unit Record ID#:	
OPS Representative:	Date:	
Tank Identification Number(s):		
Tank Contents:		
Facility Maps - (copies for Region Files):		
Description of Facility Operations:		
Interview Questions (Unit specific)		
Pre-interview with the operator to determine if the operator's Breakout Tank system incorporates the following design features.		
Does the operator have an approved OPA (Oil Pollution Act) Response Plan on file with DOT/RSPA/OPS?	<input type="checkbox"/>	Yes <input type="checkbox"/> No
Do any of the Breakout Tanks have a history of corrosion underneath the tank bottoms?	<input type="checkbox"/>	Yes <input type="checkbox"/> No
If yes, has the operator calculated corrosion rates based on information from a API 653 internal inspection report?	<input type="checkbox"/>	Yes <input type="checkbox"/> No

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Do all of the Breakout Tank bottoms have Cathodic Protection applied?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
If not, does the operator have supporting documentation such as corrosion survey, operating records, prior test results with similar tank systems in similar environments, national, state, and local code requirements?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Notes:				
What standards were utilized, if any, for:				
<input type="checkbox"/> Construction				
<input type="checkbox"/> Inspection				
<input type="checkbox"/> Repair				
<input type="checkbox"/> Alteration				
<input type="checkbox"/> Reconstruction				
Since last inspection, has there been any change of physical condition or service of the tank(s)?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
If so, has there been any evaluation to determine the suitability for continued use?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Notes:				

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Description of Tank:			
Type of Construction	<input type="checkbox"/> Welded	<input type="checkbox"/> Riveted	
Capacity	_____ BBLs		
Construction Date	_____		
Tank Manufacturer	_____		
Type of Roof	<input type="checkbox"/> Floating	<input type="checkbox"/> Fixed	<input type="checkbox"/> Other (Identify) _____
Type of Foundation	<input type="checkbox"/> Concrete	<input type="checkbox"/> Crushed Rock	<input type="checkbox"/> Oiled Dirt/Sand
	<input type="checkbox"/> Asphalt	<input type="checkbox"/> Other	_____
Floor	<input type="checkbox"/> Single	<input type="checkbox"/> Double	
Refurbished/Modified/Repaired	_____ (Date)		
Type of Service	<input type="checkbox"/> Refined Products	<input type="checkbox"/> HVL	<input type="checkbox"/> Crude <input type="checkbox"/> Other _____
Type of alarms the operator utilizes:	<input type="checkbox"/> Overfill	<input type="checkbox"/> Underfill	<input type="checkbox"/> Fire
	<input type="checkbox"/> Other	_____	
Type of leak detection system the operator utilizes. If leak detection is utilized, then describe:			
Type of dyke: _____ Capacity of dyke area: _____ Secondary Containment: <input type="checkbox"/> Membrane <input type="checkbox"/> Impervious Liner <input type="checkbox"/> Other _____			
Is there a valve on the inlet and outlet line of the tank area so one can isolate _____ <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is fire fighting equipment: adequate; <input type="checkbox"/> Yes <input type="checkbox"/> No in proper operating condition; <input type="checkbox"/> Yes <input type="checkbox"/> No plainly marked; <input type="checkbox"/> Yes <input type="checkbox"/> No and located to be easily accessible? <input type="checkbox"/> Yes <input type="checkbox"/> No			

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Are signs around each breakout tank area visible to the public? Signs must include

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Yes

☐

No

Is there protection for each breakout tank area from vandalism and unauthorized

☐

Yes

☐

No

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S - Satisfactory

U - Unsatisfactory

N/A - Not Applicable

N/C - Not Checked

Subpart F - Operations & Maintenance		S	U	N/A	N/C
' 195.402(a)	Protection against Ignition and Safe Access/Egress Involving Floating Roofs				
' 195.402(c)(3)	405(a). After October 2, 2000, protection provided against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities involving aboveground breakout tanks must be in accordance with API Recommended Practice 2003. (unless operator noted in procedures manual (' 195.402(c)) why compliance with API 2003 is not necessary for the safety of a particular breakout tank..)				
	405(b). The operator must review and consider the potentially hazardous conditions, safety practices and procedures with respect to access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance or repair activities in API Publication 2026 for inclusion in the procedure manual (Sec. 195.402(c)). (After October 2, 2000)				
' 195.402(a)	External Corrosion Control				
' 195.402(c)(3)	.416(j). For existing aboveground breakout tanks where corrosion is controlled by a cathodic protection system, the CP system must be inspected to insure operation and maintenance.				
	.242(c). The installation of cathodic protection for the bottom of aboveground breakout tanks with a capacity greater than 500 barrels (79.3m ³) and built to API Specification 12F, API Standard 620, API Standard 650 (or its predecessor Standard 12C), after October 2, 2000 must be in accordance with API Recommended Practice 651, unless operator noted in procedures manual (' 195.402(c)) why compliance with API 651 is not necessary for the safety of a particular breakout tank..				
	.242(d). The installation of a tank bottom lining for the aboveground breakout tanks built to API Specification 12F, API Standard 620, API Standard 650 (or its predecessor Standard 12C), after October 2, 2000 must be in accordance with API Recommended Practice 652, unless operator noted in procedures manual (' 195.402(c)) why compliance with API 651 is not necessary for the safety of a particular breakout tank.				
' 195.402(a)	Tank Repairs, Alterations, and Reconstruction Procedures				
' 195.402(c)(3)	.205(a) Aboveground breakout tanks repaired, altered, or reconstructed and returned to service must be capable of withstanding the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads.				

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<p>.205(b) (1) Designed for approximately atmospheric pressure, constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated built to API Standard 650, or API Standard 12C must be repaired, altered, or reconstructed according to API Standard 653.</p> <p>(2) Built to API Specification 12F or API Standard 620, the repair, alteration, and reconstruction must be in accordance with the design, welding, examination, and material requirements of those respective standards.</p> <p>(3) For high pressure tanks built to API Standards 2510, repaired, altered, or reconstructed will be in accordance with API 510.</p>				
<p>.422 Repairs made in a safe manner and are made so as to prevent damage to persons or property.</p>				

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		S	U	N/A	N/C
<p>' 195.402(a) ' 195.402(c)(3)</p>	<p style="text-align: center;">Impoundment, Protection Against Entry, Relief, and Venting Procedures-Aboveground Breakout Tanks</p>				
	<p>.264(a) A means must be provided for containing hazardous liquids in the event of spillage or failure of an aboveground breakout tank.</p>				
	<p>.264(b) (1) For tanks built to API Specification 12F, API Standard 620, and others (such as API Standard 650 or its predecessor Standard 12C), the installation of impoundment must be in accordance with the following sections of NFPA 30:</p> <p style="padding-left: 40px;">(i) Impoundment around a breakout tank must be installed in accordance with Section 2-3.4.3; and</p> <p style="padding-left: 40px;">(ii) Impoundment by drainage to a remote impounding area must be installed in accordance with Section 2-3.4.2.</p> <p>(2) For tanks built to API Standard 2510, the installation of impoundment must be in accordance with Section 3 or 9 of API Standard 2510.</p>				
	<p>.264(c) Aboveground breakout tank areas must be adequately protected against unauthorized entry.</p>				
	<p>.264(d) Normal/emergency relief venting must be provided for each atmospheric pressure breakout tank. Pressure/vacuum-relieving devices must be provided for each low-pressure and high-pressure breakout tank.</p>				
	<p>.264(e) For normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000, compliance with paragraph (d) of this section requires the following for the tanks specified:</p> <p style="padding-left: 40px;">(1) Normal/emergency relief venting installed on atmospheric pressure tanks built to API Specification 12F must be in accordance with Section 4, and Appendices B and C, of API Specification 12F.</p>				
	<p style="padding-left: 40px;">(2) Normal/emergency relief venting installed on atmospheric pressure tanks (such as those built to API Standard 650 or its predecessor Standard 12C) must be in accordance with API Standard 2000.</p>				

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<p>(3) Pressure-relieving and emergency vacuum-relieving devices installed on low pressure tanks built to API Standard 620 must be in accordance with Section 7 of API Standard 620 and its references to the normal and emergency venting requirements in API Standard 2000.</p>				
<p>(4) Pressure and vacuum-relieving devices installed on high pressure tanks built to API Standard 2510 must be in accordance with Sections 5 or 9 of API Standard 2510.</p>				

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		S	U	N/A	N/C
<p>' 195.402(a) ' 195.402(c)(3)</p>	<p>Overpressure Safety Devices Procedures</p>				
	.428(a) Inspect and test each pressure limiting device, relief valve, pressure regulator, or other pressure control equipment. (Annually/15 mo)				
	.428(c) Aboveground breakout tanks <ul style="list-style-type: none"> · constructed or significantly altered according to section 5.1.2 of API Standard 2510 after October 2, 2000 must have an overfill protection system according to 5.1.2 of API Standard 2510. · if over 600 gallons (2271 liters) constructed or significantly altered after October 2, 2000, must have overfill protection according to API Recommended Practice 2350 unless operator noted in procedures manual (' 195.402) why compliance with API RP 2350 is not necessary for the safety of a particular breakout tank. 				
	.428(d) After October 2, 2000, paragraphs (a) and (b) of ' 195.428 also applies for the inspection and testing of pressure control equipment and to the testing of overfill protection systems.				
<p>' 195.402(a) ' 195.402(c)(3)</p>	<p>In-service Breakout Tank Inspection Procedures</p>				
	.432(a) For tanks other than the one being specified in ' 195.132(b), such as anhydrous ammonia and non-steel tanks: Inspection of breakout tanks. (annually/ 15mo)				

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	<p>.432(b) Each operator shall inspect physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to section 4 of API Standard 653. However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under Sec. 195.402(c)(3).</p> <p><u>Guidance</u> <i>Monthly (routine) visual inspection procedures for the following: Tank exterior surface checking for: Leaks, Shell distortions, Signs of settlement, and Corrosion. The condition of the: Foundation, Paint coating, Insulation systems, and Appurtenances.</i></p>				
	<p><i>Provision for a visual in-service external inspection by an API Std 653 Authorized Inspector at least once during the following intervals, whichever is less:</i></p> <p style="padding-left: 40px;"><i>At least every 5 years or</i> <i>At the quarter of corrosion rate life of the shell (if known)</i></p>				
	<p><i>Provision of the ultrasonic shell thickness inspection procedures</i></p>				
	<p><i>Provision for an out-of-service internal inspection, with an API Std 653 Authorized Inspector conducting visual inspection and reviewing NDE results, with the intervals determined by the following:</i></p> <p><i>If corrosion rate is known based on actual measurements or similar service condition, the interval set according to the bottom plate minimum thickness at the next inspection. The interval shall not exceed 20 years.</i></p> <p><i>If corrosion rate is NOT know and similar service condition not available, within 10 years (starting from the time specified in ' 195.432(d) below) to establish corrosion rate.</i></p>				

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		S	U	N/A	N/C
	<p>.432(c) Each operator shall inspect the physical integrity of in-service steel) aboveground breakout tanks built to API Standard 2510 according to section 6 of API 510.</p>				
	<p>.432(d) The intervals of inspection referenced in paragraphs (b) and (c) begin on) May 3, 1999, or on the operator's last recorded date of the inspection, whichever is earlier.</p> <p style="padding-left: 40px;">For API 12F, 12C, 650, and 620 tanks, the "clock" starts at the earliest of:</p> <ol style="list-style-type: none"> 1) May 3, 1999, 2) Last record date of the inspection (annual), or 3) Whenever API Std 653 program was established for the particular tank. 				
' 195.402(a)	Pressure Test Procedures/Pressure Testing Aboveground Breakout Tanks				

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' 195.402(c)(3) ' 195.406(a)(3)	.307(a) Aboveground breakout tanks built to API Specification 12F and first placed in service after October 2, 2000, pneumatic testing must be in accordance with section 5.3 of API Specification 12F.				
	.307(b) Aboveground breakout tanks built to API Standard 620 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.18 of API Standard 620.				
	.307(c) Aboveground breakout tanks built to API Standard 650 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.3 of API Standard 650.				
	.307(d) Aboveground atmospheric pressure breakout tanks constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C that are returned to service after October 2, 2000, the necessity for the hydrostatic testing of repair, alteration, and reconstruction is covered in section 10.3 of API Standard 653.				
	.307(e) Aboveground breakout tanks built to API Standard 2510 and first placed in service after October 2, 2000, pressure testing must be in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 or 2.				

PART 195 - FIELD REVIEW		S	U	N/A	N/C
' 195.262	Pumping Facility: vapor warning; station safety devices; 50ft rule; firefighting equipment				
' 195.414	Cathodic Protection				
' 195.416(i)	Pipeline Components Exposed to the Atmosphere				
' 195.416(c)	Rectifiers				
' 195.428	Pressure Limiting Devices, relief valve, pressure regulator, or other pressure controller Pressure Limiting Devices				
' 195.432	Breakout Tanks				

PART 195 - RECORDS REVIEW		S	U	N/A	N/C
' 195.205(a)	Records reflecting repaired, altered, or reconstructed breakout tanks ability to withstand internal pressures and anticipated external loads.				
' 195.264(a)	Impoundment calculations				
' 195.264(d)	Record of calculations for normal/relief vents and pressure/vacuum vents.				

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' 195.307(b)	Hydrostatic/pneumatic testing records for above ground breakout tanks. <ul style="list-style-type: none"> · Built according to API 12F, testing according to Sect. 5.3 of API 12F. · Built according to API 620, testing according to Sect. 5.18 of API 620. · Built according to API 650, testing according to Sect. 5.3 of API 650. · Repaired/alterd/reconstructed according to API 2510, testing according to Sect. 5.3 of API 650. · Built according to API 2510, testing according to ASME Boiler and Pressure Vessel Code, section VIII, Division 1 or 2. 				
' 195.416(j)	Surveys, inspections, and tests as per: Section 11.4.5 of API Recommended Practice 651. Section 11.4.7 of API Recommended Practice 651 Pressure Limiting Devices				
' 195.432(b)	Breakout tanks external and internal inspection according to Section 4 of API 653				
' 195.432(c)	Breakout tanks (built according to API Standard 2510) external and internal inspection according to Section 6 of API 510.				